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ABSTRACT

Employment potential in developed and developing nations is analyzed from an economic viewpoint. Estimates by the International Labor Office are that the global labor force will grow by about 900 million people from 1980 to 2000. It is projected that these 900 million people will join the current labor force including approximately 53 million unemployed and about 300 million underemployed. Accurate measures of employment are difficult because different countries count employment in different ways and often employ statistics of poor quality. The employment problems of poor countries center of low productivity and low earnings--both problems related to lack of technological advancement. In industrial nations, on the other hand, employment problems are exemplified by accelerating wage costs, inflation, and unit labor costs which are too high to compete with production from developing nations. To deal with these employment problems, policy makers must tailor economic strategies to meet specific needs. For example, policy makers in industrial nations might stress adjusting to long term trends such as slower growth, slowing the inflation rate, and targeting more funds to employment programs. In developing nations, policies should emphasize productivity, capital investment in labor-intensive industries, and massive agricultural aid. (DB)

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Global Employment and Economic Justice: The Policy Challenge

Kathleen Newland

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In early 1979, the U.S. Government greeted with great relief the report that unemployment had dropped to 5.7 percent. Ten years earlier, an unemployment rate that high would have been greeted with horror as socially and politically unacceptable. Unemployment in Europe in the late seventies reached levels not seen since the thirties. In the Third World, the proportion of the population unable to find productive work dwarfs the figures for the industrial world. Chronic high unemployment seems to have become entrenched in most of the world economy, and traditional measures for combating it appear inadequate or inappropriate—or both.

In the Great Depression of the thirties, the global economic machine broke down, throwing millions upon millions of people out of work. The current crisis in global employment is not the product of any such catastrophic malfunctioning of the economic system, and it is this fact that makes the current situation so alarming. It is possible for the world economy to tick along in what seems to be good health without providing livelihoods for vast numbers of people. As the steady stream of the unemployed and underemployed turns into a flood, a thorough reassessment of current economic policies is due. Conventional measures of economic health such as growth rates, capital/output ratios, and foreign-exchange reserves do not reveal the underlying malaise. Even conventional measures of unemployment understate the problem, sometimes grossly.

Classical economic theory assumed that the three basic factors of production—land (which includes raw materials and energy sources), labor, and capital—would always be used for production in proportions that reflected their relative abundance. Today, it is obvious that no “invisible hand” is working to ensure that optimal mix of factors. The best use of a country’s economic endowment can be obstructed by economic and social institutions such as land-ownership patterns, methods of industrial organization, choices of technology, concentrations of economic power in particular markets, income distribution, and tax policies. The purpose of sound economic management is to ensure that resources are neither overexploited nor wasted. Persistent high unemployment signals a job poorly done.

Needed: One Billion Jobs

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Over the next 21 years, the global labor force will grow by about 900 million people. This is the estimate of the International Labour Office (ILO), based on some fairly conservative assumptions about participation in the work force. These 900 million will join some 50 million currently unemployed people and about 300 million who are underemployed.¹ The figures are numbing. They are also notoriously imprecise. But even a generous allowance for error cannot blunt the challenge of finding work for more than one billion job-seekers by the year 2000.

In the final quarter of this century, an average of 36 million people will join the global labor force each year. During the previous 25 years, the average annual addition was about 22 million. (See Table 1.) Existing employment policies have not produced adequate jobs for even the current number of would-be workers. More effective programs must be established if governments are to avoid the economic problems created by a massive waste of human resources, the social problems associated with unemployment's impact on individual welfare, and the political problems generated by great numbers of people being shut out of the economic mainstream.

Table 1: Increase in World Labor Force, With Projections to 2000

Region	1950-1975	1975-2000
	(millions)	
Developed	123	118
Developing	423	782
World Total	545	900

Source: International Labour Office.

**"Work is still the primary means
by which people establish a
claim to a share of production."**

From an economic viewpoint, human labor must be seen first of all as a resource whose waste diminishes the total output of goods and services. Massive unemployment should be regarded with the same alarm that would greet the rupture of a major oil pipeline that daily spilled millions of barrels of fuel. Moreover the need to use labor resources more fully is highly compatible with the need to use other resources more carefully. In many instances, more conservative resource consumption will involve substituting labor for energy and raw materials.

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For an individual whose labor is wasted, inadequate employment usually leads to personal hardship. In many poor countries today, employment is a more serious and intractable welfare problem than food supply is. India, for instance—long associated with the Malthusian nightmare of too many people and too little food—has enjoyed an excellent series of harvests in the past few years. Grain reserves have been built up and some grain has even been exported. Widespread hunger and malnutrition persist in India not because there is too little food to go around, but because the poor do not earn enough to obtain an adequate diet. The employment problem thus translates directly into a distribution problem because most economies allocate the fruits of production to people primarily on the basis of their employment. The family serves as a secondary channel of distribution where members who work in the cash economy share their income with those who do not. Some institutions, including most prominently governments, also transfer income between groups. But work is still the primary means by which people establish a claim to a share of production. To be without work is to place that claim in jeopardy.

People unable to find work after a prolonged search, or unable to achieve an adequate standard of living through the work they do find, have ample reason to feel that the economic system has let them down. Some may respond to the failure of economic policy with resignation, others with political activism, a few, with nihilistic rage. It is a rare election today in which employment issues do not play some part. They take on a particularly bitter political cast when opportunities for work are unevenly distributed—and this, alas, is

usually the case. Many long-standing internal disputes in modern states, such as the separatist movements of the Basques in Spain, the Corsicans in France, and the French Canadians, are fueled in part by the poor employment opportunities of the aggrieved group. Whether it afflicts a whole population or is concentrated in a particular segment, high unemployment is a potential, if not an actual, threat to those who hold political power. This is as it should be, for the political establishment cannot be said to be safeguarding the interests of the people if the people are without a decent livelihood.

The employment problem is, in part, the fallout from the population explosion of the century's third quarter. There are now some encouraging signs that world population growth is beginning to slow down.² But most of the people who will be part of the labor force by the year 2000 have already been born. Thus demographic change, while crucial to the long-term solution of the employment problem, will have very little impact on the need for jobs in the next two decades.

Demographic changes work themselves through the labor market over a long period. The legacy of an era of high population growth is felt for 15 to 20 years after growth slows, as children pass through the schools and grow to working age. In Western Europe, birth rates have been low during the seventies, but the labor market is only now digesting the demographic bulge caused by the high birth rates of the fifties and sixties. Between 1979 and 1985, the population of the nine European Community countries is expected to increase by only 4.4 million, but the work force will grow by 9.7 million. In individual countries, the differential is even more startling. Over the next six years, the West German population will shrink by 1.4 million, but the labor force will grow by two million.³

Once the children of the baby boom have made their way into the labor markets of the industrial countries, the number of new entrants to the labor force will begin to fall year by year. At the same time, the number of workers retiring will begin to rise as the population ages. These two trends together will slow and eventually halt the growth of the work force. Some demographers are even predicting

that the West will suffer labor shortages in the late eighties and the nineties.⁴ Other developments may prevent these shortages from materializing: the retirement age may drift upwards, more women may seek paid employment, or the demand for labor may slacken. Still, it is safe to predict that the labor force in the rich countries will be growing much more slowly (if at all) a decade hence than it is now. The dimensions of the industrial nations' employment problem at the end of the century, therefore, will be determined more by social, technological, and economic forces than by demographic pressures.

By contrast, the sheer demographic momentum built into labor-force growth in the Third World is awesome. In Mexico, for example, more than half of the current population of 64 million is under the age of 16; by the year 2000, the labor force will more than double. The adult labor force today amounts to only 28 percent of the population, since many women never enter the formal job market. And of this 28 percent, or 18 million workers, only half are fully employed. Each year, hundreds of thousands of young people enter a job market that has been able to absorb only a fraction of those who preceded them.⁵

The employment challenge in developed countries is so different from that in the Third World, both in scope and in nature, that it is almost misleading to discuss it in the same terms. In the Council for Mutual Economic Assistance (COMECON) countries, including the Soviet Union and most of Eastern Europe, the employment problem is actually a labor shortage resulting from a combination of demographic, historical, economic, and political factors. In the industrial West, including the United States, Western Europe, and Japan, a cyclical pattern of unemployment seems to have given way to chronically high rates that persist in the face of expansionary measures and high inflation.

Yet the vast majority of the 900 million people who will enter the labor force by the year 2000 will live in countries like Mexico, with youthful populations and already overcrowded job markets. The less developed countries will be home to eight out of nine of the new job-seekers.⁶ These people's need for a livelihood is the heart of the global employment problem.

Measuring Employment

10 It is interesting and useful to consider the patterns of work in rich industrial countries and those in poor developing nations, for the two present very different aspects of the global employment picture. Before making comparisons, however, the different ways of measuring employment should be considered. Even the best employment statistics give only an approximate idea of how much labor is actually wasted. Statistics, especially from poor countries, are often of poor quality, while the concepts and definitions used in collecting them may bear little relation to the actual configurations of people's economic lives. The numbers should be taken as evidence rather than as truth, to borrow a phrase from Kenneth Boulding.⁷

Different countries count their employed and unemployed in different ways. Some report as unemployed only those people who have registered with official employment boards. Many countries rely on periodic sample surveys of the population, but some will record as employed anyone who has worked even one hour a week, while others have higher time thresholds. Some include part-time workers among the employed while others leave them out altogether. Some surveys will ask a person if he or she has worked or looked for work during the previous day while others will base the question on the experience of a week or six months or a year. These variations make it difficult to compare national unemployment figures.

Analyzing who is in the labor force and who is not may be even trickier than distinguishing the employed from the unemployed. Definitions of the labor force normally exclude people who are not actively seeking work because they know that none is available. These people are labeled "discouraged workers," and their numbers are sizable in some countries. The United States estimated the total at one million in 1977, a year when seven million people were officially unemployed.⁸ If the discouraged had been counted with those out of work, the U.S. unemployment rate that year would have been 8 percent instead of 7 percent. In poor countries, discouraged workers probably represent an even larger proportion of the potential labor force.

**"Underemployment
is much more widespread
in the Third World
than open unemployment."**

Students, housewives, and retired people, like discouraged workers, are not included in the labor force although their status may be ambiguous. Sample surveys in the Indian state of Kerala have recorded as many as 48 percent of 15-to-19-year-old boys as "students"—an extremely high proportion for a poor agrarian region. Quite a few are probably students by default, prolonging their schooling because they cannot find appropriate jobs. Surveys in a number of countries also show that many housewives would enter the labor force if both jobs and child care were available. In the United States, the proportion of adult women participating in the labor force rose from 34 to 50 percent between 1950 and 1978, which created a much larger demand for jobs than would have been anticipated on the basis of static assumptions about women's work.⁹

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Accurate projections about the labor force participation of different groups are needed for realistic employment planning. These assumptions require, if not a social crystal ball, at least a fair amount of insight and skill. Planners must try to foresee the employment implications of changing social patterns, whether in women's roles, in retirement ages, or in the educational system. The size and stability of groups normally excluded from the definition of the labor force can have an enormous impact on the perceived need for jobs.

One of the most severe problems with employment statistics is the measure of underemployment. In poor countries, millions of working people earn less than they need to maintain a minimally adequate standard of living. The problem may arise from either the quantity or the quality of work. The most common method of measuring underemployment, however, only counts additional time available for work. This satisfactorily accounts for workers who are subject to involuntary idleness, but not for people who work long hours at tasks of such low productivity that their earned income isn't enough to cover basic needs. Underemployment is much more widespread in the Third World than open unemployment, but it is notoriously difficult to get a statistical handle on the size of the problem.

Probably the best available measure of the adequacy of employment is the measure of poverty. An income yardstick takes in both unemployment and underemployment, and is the most appropriate tool

for detecting the welfare consequences of the employment picture. It is perhaps the only approach that can distinguish between the recently graduated, unemployed child of a middle-class family and a landless laborer or ricksha operator. The latter two do have jobs and may indeed work long hours, but they are more of an employment problem than the young graduate in terms of personal welfare. The young graduate, however, is much more likely to show up as an employment problem in national statistics.¹⁰

Most of the terms used to describe employment and unemployment evolved in the context of industrial economies and are not very useful for describing the situation in developing countries. Millions of Third World workers do not fit neatly into conventional categories, such as people whose work is mostly seasonal, people who work irregularly in the informal sector, and people whose production does not enter the cash economy. Statisticians who compile employment data seem to have particular difficulty classifying working women, especially women who work without wages in family enterprises such as small farms or shops.

The easiest group to measure in the Third World comprises workers in the modern urban sector, whose employment conditions most nearly resemble those in the advanced industrial countries. It is always tempting to emphasize these measurements because they tend to be the most reliable. But emphasizing them can lead to concentration on the wrong issue—the employment problems of a relatively privileged minority.

India's unemployment estimates shed some light on the importance of choosing the right measurement tools. In a total population of roughly 630 million, about 12 million people are currently on the official unemployment rolls. This is a huge number in absolute terms, but it actually represents an unemployment rate comparable to that in Western Europe and the United States. However, if underemployment is also considered—using the conventional measure of additional hours available for work—in 1973 total unemployment (in person-days) was equivalent to 4.7 times the official total. If this ratio still holds in 1979 (and there is no reason to believe it would have declined), total unemployment would be roughly equivalent to 57 million people.¹¹

Applying the income yardstick to India's situation gives a third estimate of the size of the employment problem there. The figures are far from precise, but they do yield some evidence about the adequacy of available work. Estimates are that between 40 and 66 percent of India's population, or 252 to 416 million people, live below the officially designated poverty line—a line so low it is hard to imagine how people survive below it.¹² Absolute poverty on this scale is a reflection of inadequate employment. If the labor force participation rate of the poverty-stricken matches the rate of the population as a whole, one-third of those affected by absolute poverty are workers. There are, therefore, between 83 and 137 million Indian workers whose employment does not bring them and their dependents a decent standard of living.

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Crude though this is, this income estimate of employment adequacy gives a far more realistic assessment of the desperate need for employment in India than the official unemployment rate does. If all the 12 million officially unemployed were to find productive work tomorrow, India still would not have come close to solving the real employment problem—low productivity and earnings among the very poor. An ILO report on poverty in Asia, published in 1977, stated flatly that "most of the poor are not unemployed and many of the unemployed are not poor." None of the empirical studies cited by the ILO report identified unemployment as a "prominent cause" of poverty in Asia.¹³

None of this is meant to say that open unemployment in the Third World is not a serious problem. It is. The numbers involved are enormous, and the waste of human resources is massive. But in most poor countries open unemployment is the tip of the iceberg. It is important to see the employment problem whole so that policies can be designed to solve it wholly.

Jobs and Joblessness in Rich Countries

Eastern Europe and the Soviet Union have an employment problem that must seem enviable to many others—a shortage of labor. According to official statistics, overt unemployment virtually disappeared during the fifties from all the European socialist states except

Yugoslavia. In 1975, shortfalls of industrial labor reached 10 percent in Czechoslovakia, and 2 to 4 percent in Bulgaria. Ironically, the surplus demand for labor generates a certain level of residual unemployment—perhaps 2 percent—as workers change jobs frequently in order to better their pay, position, or location.¹⁴

The Eastern European labor shortage stems in large part from the region's massive losses during World War II, as well as during the political turmoil of the forties and fifties. It has been perpetuated by extremely low birth rates, which have brought population growth down to 1 percent or less in most COMECON countries. As a result, the labor shortage will be even more acute in the eighties. The Eastern Europeans have not shown any inclination to ease their tight labor markets by permitting immigration, perhaps because they fear that social disruption would result. Foreign workers are allowed in only for short periods of work on specific projects under tightly controlled conditions.

Many would argue that COMECON's quandary is less one of too few workers than of too little output per worker. According to official Soviet figures, the productivity of Russian workers is only about 55 percent that of their American counterparts. The reasons are in part historical. Production processes in many industries evolved at a time of labor surplus and full employment policies. Overmanning was not considered much of a sin under those conditions, and some incentives to pad the work roles within individual enterprises got built into the system: managers' salaries, for example, are determined in part by the number of employees on their payrolls.¹⁵

Spurs to greater output per worker in Eastern Europe tend to be weak. Wage differentials are kept low and consumer goods are relatively scarce, so there is little material incentive for outstanding performance. Decision making is highly centralized, which leaves little scope for plant-level innovation. High turnover, absenteeism, and alcoholism are other drags on output and may signal a morale problem in the work force. A slowly growing labor force with low productivity could be a serious constraint on growth for the COMECON countries if solutions to these problems are not found.

The only other significant cluster of labor-deficit countries consists of some of the oil-producing states in the Middle East. The huge financial resources of these countries stand in marked contrast to the size and economic level of their populations. Vast numbers of foreign workers have been imported to support the rush to industrialization based on oil revenues. As much as half of the male labor force of Yemen is working in Saudi Arabia at any given time. Workers pour into the Persian Gulf area from all over the Middle East, as well as from India, Pakistan, South Korea, and other countries. Managers, skilled laborers, and professionals are drawn from all over the world. This dependence on foreign workers is one factor that has led oil economist Walter E. Levy to question the long-term development prospects of the oil-rich states. He has compared them to Spain in the sixteenth and seventeenth centuries, swamped with riches from its colonial empire. Having failed to develop its human resources, Spain gained little of lasting benefit from its windfall of gold and silver.¹⁶

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In the early seventies, Japan and several Western European countries also faced labor shortages. Japan's answer to the tight labor market was an impressive increase in output per worker. West Germany, France, Switzerland, and others coped with the excess demand for labor by importing workers from the Mediterranean countries such as Spain, Italy, Portugal, Turkey, and Yugoslavia. The years of labor shortage came to a rather abrupt end, however, with the 1973-74 recession. As a result of the weak recovery from recession, most Western industrial countries are now experiencing levels of unemployment that equal or surpass any they have known in the past 20 years. In the European Community, overall joblessness stands at nearly 6 percent of the labor force, compared to 2.5 percent in 1974. In Japan, there were two job openings per job applicant in 1973; now the reverse ratio prevails.¹⁷

These unemployment levels would be even higher if it were not for the cushioning effects of some changes in the composition of the labor force. In some European countries, much of the economic hardship has been borne by immigrant workers. The number of foreign workers in West Germany has declined by 700,000 or more since 1973, and over one million immigrants remain in Germany unem-

ployed. France is offering a \$2,000 payment as inducement for foreign workers to go home, and is now turning to more Draconian incentives (such as refusing to allow foreign workers' families to join them) since few immigrants have responded to the financial offer. Switzerland has managed to endure a 12 percent decline in employment since 1973 with almost no rise in unemployment rates by repatriating thousands of immigrants. These countries have quite literally exported part of their unemployment. Japan did not have that option, having few immigrants, but since the start of the recession the number of women in the labor force has declined by nearly one million—a number almost as high as the official total of unemployment in Japan.¹⁸

In North America, there has been little of this cushioning effect on unemployment rates. Immigration, both legal and illegal, continues to augment the labor force. Women continue to enter the job market in record numbers. Across the board, labor force participation rates are rising. The result is paradoxical: great numbers of new jobs are created, yet unemployment remains at an historically high level. Canadian statisticians calculate that if participation rates had remained constant at the April 1977 level, the unemployment rate for April 1978 would have been 7.6 percent instead of the 9.3 percent that was actually recorded. Over that one-year period, 327,000 new jobs were created, but the number of job-seekers grew by 410,000. The U.S. economy was more successful at keeping up with the increase in its labor force; unemployment actually fell during 1978 as job creation outpaced labor force growth by about a half-million places. Still, at the end of 1978 the U.S. unemployment rate was 5.9 percent, and it was widely expected to rise during 1979.¹⁹

The smooth curves of classical economics are based on the assumption that labor markets are homogeneous—that any worker is available for any job. This, of course, is far from being the case in the real world. In fact, a substantial part of the unemployment in rich nations arises from a poor fit between available workers and available jobs. In Japan, for example, as many as three-quarters of a million skilled jobs are going begging, despite open unemployment of over one million workers and hidden unemployment of perhaps another four million. The trouble is that the job openings are in fields like

"A substantial part of the unemployment in rich nations arises from a poor fit between available workers and available jobs."

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flight technology, electronics, information, and public services, while the redundant workers are in declining industries like textiles and shipbuilding and have skills that are not easily transferable. Similarly, in the United States a shortage of skilled blue-collar and clerical workers and some professionals coexists with high overall unemployment in which the unskilled figure strongly; in 1978, help-wanted advertising hit new highs while unemployment stuck at the 6 percent level.²⁰

In the sixties, most economists believed that accelerating wage costs would begin to generate inflation when unemployment fell to about 4 percent. Now, many expect this effect at 5.5 or even 6 percent unemployment. It is terribly unfortunate that this "trigger" level of unemployment has crept into common parlance as "full employment"—a definition that defies common sense. Identifying the trigger point is useful; it can indicate when general economic stimulus becomes an inefficient way to create jobs and may indeed spur inflation by putting additional pressure on already tight markets for skilled labor. It is by no means clear that the U.S. economy has reached that trigger point and it is unlikely that anyone even knows precisely where it is. Labor costs have not been the leading contributor to current inflation, even in labor-intensive sectors like construction. But there is reason to believe that much—though certainly not all—of the unemployment now afflicting the United States and other members of the Organisation for Economic Co-operation and Development (OECD) is "structural unemployment"; it derives from the structure of the economy and of the labor force rather than from a low level of economic activity.

The two most dire threats to employment in the industrial nations are seen—or imagined—to be cheap labor abroad and automation. Lower labor costs in other countries entice domestic industries by allowing competitive goods to be produced and sold more cheaply. For once, it works just the way Adam Smith said it would: the poor countries are displaying their comparative advantage in labor-intensive products, and the marketplace is giving them their due. In a sense, the rich countries are victims of their own success in raising the incomes of the working class to the point where, despite increases

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in productivity, unit labor costs are too high to compete with Third World producers.

18 Logically, perhaps, labor-intensive industries like textiles, footwear, and electronic sub-assembly should be located in developing countries, but this is politically and socially very difficult. Because they are labor-intensive, these industries are often important employers in industrial countries, even when their competitive position in the international market is declining. The textile and garment industries still account for 10 percent of industrial employment in the European Community, for example, which would make their departure awkward.²¹ The textile industry will never disappear entirely from Europe, but it is likely to become more confined to producing for a small and specialized segment of the world market—chiefly, the luxury market—and the number of Europeans it employs is likely to shrink. Competition from the Third World is now also putting pressure on some heavy industries in the West, notably steel and shipbuilding.

Technological advance has been greeted with forecasts of massive unemployment ever since the invention of the steam engine. The current generation of microelectronic technology, however, does seem to give some cause for concern. Microprocessors are tiny computers that can now be built very easily and cheaply. The most familiar example to most people is probably the pocket calculator, the cheapest of which has come down in price over the last decade from several hundred to less than ten dollars.

Microprocessors have an enormous range of applications, from monitoring the flow of material in a chemical plant to monitoring the condition of a critically ill patient. Unlike most previous waves of automation, microelectronic technology replaces skilled as well as unskilled labor—brains as well as brawn. Many of the workers it displaces will be white-collar workers in service industries. It also differs from earlier changes in its pace: while it took nearly two centuries to get from the beginning of the Industrial Revolution to Toyota's assembly lines and factory ships, the microprocessor revolution may be completed within a few decades. A recent report by the French Government warns that the new technology may cut employ-

"Undifferentiated policies to stimulate investment could actually aggravate unemployment by hastening the adoption of new, labor-saving technologies."

ment in banking and insurance by 30 percent in the next ten years, while a West German electronics company predicts that 40 percent of all office work currently done by hand will be done by machine in 1990.²² The social changes that accompany such shifts may be as wrenching as those of the Industrial Revolution, but society has much less time to adjust to them.

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The developed economies have survived the shifts from agriculture and from industry toward the service sector. But no one seems to be sure where workers who are displaced from the service sector will go. Certainly people will be needed to produce and operate the new machines, and the new technology will undoubtedly generate jobs that have not even been thought of yet. Still, many observers are worried that far more jobs will be lost than will be created. There is further concern that if traditional macroeconomic remedies are applied in an effort to combat the unemployment, they could have a perverse effect: undifferentiated policies to stimulate investment could actually aggravate unemployment by hastening the adoption of new, labor-saving technologies.

The impact on jobs of structural changes in the economy is borne disproportionately by particular groups in the population. The groups most affected are women, minorities, migrants, and youth—those traditionally at the end of most distributive queues. In mid-1978, the overall U.S. unemployment rate was about 6 percent. The rate for adult men was just over 4 percent, while for adult women it was just over 6 percent. Joblessness among minority groups stood at twice the general rate. Among teenagers of all races, unemployment topped 16 percent. At the very end of the employment line, minority teenagers suffered an unemployment rate of 38 percent. Past experience with "full employment" demonstrates that even if macroeconomic manipulations worked like a charm, economic expansion would not necessarily solve the structural problem. In 1969, when overall unemployment dropped to a spectacular-sounding 3.5 percent, 12 percent of all teenagers in the labor force were still without jobs, including 26 percent of young black women.²³

Unemployment among the young is a serious problem in all the OECD countries except Japan, where it is concentrated among

workers of late middle age. In the European Community, workers under 25 years of age make up 17 percent of the working population. Yet they account for 37 percent of the unemployed. Unemployment among people aged 20 to 25 is twice the Community average; for those under 20, the rate is three times the average. In the OECD countries collectively, four out of ten unemployed people are under 25.²⁴

The social harm caused by high youth unemployment is perhaps even more serious than the economic harm. Young people are often cushioned by their families from the full brunt of individual poverty. Yet the legitimate fear of social observers is that if early experience in the labor market is characterized by frustration and a sense of inadequacy or uselessness, the resulting alienation may persist throughout a person's working life.

The high unemployment rates for youth, women, and minority group members are a product of discrimination against these workers on the labor market, as well as their poor access to training in marketable skills and their relative lack of job experience. Together these factors weave a circle that is difficult to escape: it is hard for the unemployed to get jobs because they haven't already had jobs; their lack of experience calls their productivity into question so that employers are reluctant to hire them. Employers' low expectations of this part of the work force can easily become a self-fulfilling prophecy.

It is difficult to escape the conclusion that concentration of unemployment among relatively powerless groups is a convenience for both the economic and the political establishments. The new lumpen proletariat is distinguished not by its class affiliation but by sex, race or nationality, and age. It has therefore less potential for cohesion than Marx may have envisioned. An unemployed woman may well be married to an employed man, just as an unemployed youth is probably the son or daughter of one; both are attached to the economic mainstream and are perhaps less likely to conclude that the economic system as a whole should be changed. Immigrant workers, should they develop such views, can more easily be disregarded than citizens since they cannot participate fully in the political process—especially if they are illegal immigrants. Domestic racial or regional

minority groups, however, are more likely to organize effective political action to protest their economic condition.

If the political role of the chronically unemployed in the developed countries differs from classic Marxist expectations, so does their economic role. A body of unemployed workers does not necessarily depress wages across the board. Organized labor (in the poor countries as well as the rich) usually has the economic clout to protect its wages even when the job market is slack. Yet there are particular areas of economic activity in which a surplus of willing labor has driven average wages down, as in the construction industry in the United States. Union wages in construction have held, but more than half the buildings under construction are nonunion jobs, with the workers receiving lower wages. Similarly, the major issue in a New York City school-bus strike in early 1979 was the hiring of nonunionized, lower-paid drivers.²⁵

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Conflicts between organized and nonunion labor could intensify if the demand for labor does diminish in the industrial countries. The chief group to profit in that case would of course be the employers, who cannot be relied upon to pass along their increased profits to consumers in the form of lower prices. The alternative to increasing polarization of the labor force is some equitable arrangement for sharing both employment opportunities and the increased production made possible by technological advances.

The Employment Problem in Poor Countries

Measured, open unemployment is a poor guide to the inadequacy of jobs in the Third World. Social security and employment insurance schemes cover only a tiny portion of the labor force in most poor countries. In their absence, most people who are able to work must find some kind of employment, no matter how unsuited to their skills or how unremunerative. For most workers, real unemployment would spell disaster, because their financial margins are desperately thin. For that reason, unemployment is relatively rare.

In developing countries, open unemployment in the Western sense measures the problem of a special group: those who have some alternative means of support while they are looking for a job, such as a young adult who still lives off family funds, or a brother-in-law from the village who stays with relatives in the city. The open unemployment rate in a particular area may depend as much on social structures as on the state of the economy. If there is enough economic surplus within many extended families to enable them to support unemployed relatives, open unemployment can reach very high levels.

An ILO study of Abidjan, the capital of the Ivory Coast, illustrates this employment pattern. The study found that the richer the household, the more non-earning members it contained. As a result, differences in per capita income were much narrower than differences in per household income. For instance, the top income group in the study had household earnings about five times as great as the bottom group, but their per capita income was only twice as great. For three-quarters of the people studied, differences in income per person were almost extinguished by differences in household size. The unemployment rate in Abidjan rose from 9 percent in 1965 to 20 percent in 1970. Without the welfare system of the extended family, it is hard to see how this increase would have been possible.²⁶

In Abidjan, as in most Third World cities, open unemployment is concentrated among young dependents rather than heads of households. Young people can perhaps afford to wait longer for a job than self-supporting adults can, but they also may remain dependents because they cannot find work. Without an independent livelihood, they cannot afford to marry, have children, and set up separate households. In Sri Lanka and Indonesia, lack of employment has been identified as one of the causes of the rising average age of marriage.²⁷ Similarly, the unemployed are often drawn disproportionately from the ranks of the relatively well-educated. Presumably it is the slightly wealthier families who can afford to educate their children, and can by the same token support a higher than average number of non-earning members.

"One estimate for the early seventies calculated that in the poor countries of Asia and Africa only one person in ten was engaged in regular wage labor."

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The concentration of open unemployment among the less poor generates some surprising statistics. In contrast to the pattern in most Western countries, unemployment rates in the Third World are relatively low among the least privileged groups. In a city like Jakarta, newly arrived migrants—whom one would expect to find at the very end of the employment queue—have higher employment rates than established residents.²⁸ However, their earnings often are pathetically low, and their "employment" may consist of something like scrounging cigarette butts from the street and collecting the unburnt shreds of tobacco to sell for a few cents.

It is the very low productivity and earnings of the poor, rather than the lack of opportunity to work long, hard days, that is the real challenge to development policy in the Third World. In some countries, very few people work for paid wages or do so only on an occasional basis. One estimate for the early seventies calculated that in the poor countries of Asia and Africa only one person in ten was engaged in regular wage labor. A 1978 report found that in Zaire, a country with a population of 25 million, only 1.2 million people had steady, paid employment. For the others, earnings took the form of subsistence goods used directly for their own consumption, wages from sporadic, casual labor, or the proceeds of small-scale trading or selling.²⁹

Though the problem of low utilization and low earnings in the Third World is receiving more attention, employment policy remains the last bastion of the "trickle-down" development theory. Employment creation has been taken for granted as a by-product of economic growth, despite the evidence of growing poverty in less developed economies. The extrapolation of Western experience to the Third World has led policymakers to regard the rural population as a quiescent reservoir of labor for industrialization, and to look at the manufacturing sector as the engine for growth. Even fairly radical economists were writing in this vein in the sixties, as typified by the argument of P. N. Rosenstein-Rodan that Latin America should "aim at absorbing unemployment at a high level of productivity through large-scale, capital-intensive but highly productive industrialization. . . . It will take at least five to ten years to reach full employment that way—but it is the way of defeating poverty."³⁰

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Since 1969, when that was written, many countries have followed Rosenstein-Rodan's prescription to the letter, both in Latin America and on other continents, and many have achieved impressive growth rates—but almost none have defeated poverty. For Asia as a whole, the index of manufacturing output registered a gain of 247 percent between 1955 and 1966—an economic planner's dream. But the index of manufacturing employment rose only 71 percent in that period, which means that each unit of output required much less labor than in an earlier period.³¹ As a result, the growth rates that would have to be achieved to absorb a growing labor force were phenomenally high and getting higher.

Writing in 1972 of this trickle-down approach to employment creation, Guy Hunter of the Overseas Development Institute (London) observed:

If the employment programmes of the decade 1970-80 are to be framed in these terms, we shall continue to stare aghast at report after report recording 10 or 18 or 30 percent unemployment, population growth of 3 percent, employment growth of 2 percent, insufficient capital or "projects" to achieve the enormous expansion of wage-paid jobs which appears to be necessary, and a few despairing recommendations for rural works or youth brigades, which are, by clear admission, wholly inadequate to achieve the assumed goals.³²

The employment programs of most of the decade were, as Hunter feared, modeled in conventional clay and his predictions of the result have largely been borne out. The illusion of growth as a cure for poverty has been shattered. In the current Indian Five-Year Plan, an optimistically projected industrial-growth rate of 5 percent is expected to absorb less than 10 percent of the people who join the labor force over the five years. The framers of the Plan conclude that "the mere continuation of conventional industrialisation, except in selected sectors, would continue to widen the employment gap indefinitely."³³

Concentration on modern-sector industrial growth has deprived the agricultural sectors in many Third World countries of both attention

and development funds. The industrial bias translates into an urban bias that attracts people from the country to the cities, and so feeds the urban employment crisis. Urban unemployment presents a dilemma: attempts to cure it by creating more jobs in the cities can only intensify the magnetism of the cities. Thus at least part of the cure for the urban employment crisis lies in the countryside.

Despite rapid rates of urbanization in most developing countries, the majority of people are still rural dwellers: about half in Latin America, 70 percent in Africa, and 75 percent in Asia.³⁴ Poverty and lack of productive work, though common in the cities, are even more acute in rural areas. The most direct approach to the employment problem in the poor countries, therefore, is one that begins in the countryside with the occupation that employs most people: agriculture.

A great many Third World farmers eke out a living on small plots of land with almost no capital investment. The seeds are saved from the previous year's crop, the water is what Providence provides, the fertilizer (if any) is organic wastes, implements are crude, and the major agricultural input is backbreaking labor. Productivity under these circumstances is very low. People produce little more than they use directly. Their earnings are too low for them to support much secondary economic activity around them—small manufacturing or services or construction. While labor is a major factor of production, the economic return to labor is low, so there is not much incentive to use it intensively. Many rural dwellers do not have enough work to do in the slack agricultural seasons—while waiting for the crops to mature, or while the land lies fallow. In the peak seasons, however, at planting and especially at harvest, labor is in great demand; lack of it may even create a production bottleneck. There is, in short, a boom-and-bust annual cycle of labor demand in agriculture that stretches labor supply to the limit in some periods and leaves many workers idle in others.

The twin challenge of rural employment, then, is to raise agricultural productivity to the point where it generates a decent level of living for more people and to smooth out the peaks and valleys of demand for labor. When this has been accomplished, an enormous number of people can be productively employed in the rural sector, not only in

agriculture but also in small-scale manufacturing, construction, wholesale and retail trade, food processing, and badly needed services like medical care and education. These secondary activities must have a flourishing agricultural base to support them. Policies that give priority to the productivity and prosperity of small farms have the best chance of setting in motion a development process that will solve the employment problem in the poor countries.

Policies and Prospects

The strategies for dealing with the employment problems in the rich industrial countries and the poor developing nations are as different as the problems themselves. In the industrial world, the employment problem is primarily one of adjustment to long-term trends, including structural changes in the economy and slower growth. The poor countries face a more immediate challenge in the desperately low income and rapidly growing number of inadequately employed people; raising the productive capacity of these people by augmenting and redistributing productive resources is the chief imperative for Third World employment policies. Both rich and poor countries have pressing income-distribution issues before them, and the political will to solve basic equity problems may be hard to summon in both groups of countries.

The constraints on global economic growth include the rising cost of energy, damage to the environment, resource depletion, and capital scarcity. Some of these constraints could, in fact, encourage patterns of labor use that would counter the effects of slower growth. Often, methods of production that conserve energy and materials are relatively labor-intensive. Repair and reconditioning of existing equipment, which extends its useful life, in effect substitutes skilled labor for energy, raw materials, and capital. At a somewhat lower level of savings, recycling conserves energy and materials while it uses labor more intensively than the production of new materials does.³⁵

"Involuntary leisure is another name for unemployment, and in a technological age the distinction between them is a fine one."

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Decentralized, renewable energy sources use more labor than do centralized power facilities that run on nuclear or fossil fuels. One study in California calculated that a proposed nuclear power plant would directly create only 15 jobs for every hundred that would be created by a solar program designed to produce an equivalent amount of energy.³⁶ Given the growing opposition to nuclear power and the inevitable higher prices for fossil fuels, there could be an increase in demand for labor as the industrial countries turn to renewable energy sources. Whether this will balance the other forces acting to reduce the demand for labor is impossible to foretell—the uncertainties on both sides of the equation are too great. However, a government that wishes to direct the development of its economy into more labor-intensive channels would be well-advised to encourage conservation of energy and raw materials, and to pursue alternative energy sources.

Productivity increase has always been hailed as the foe of inflation and a crucial ingredient of economic advance. It allows wages to increase, for instance, without a rise in unit labor costs, and so without adding to inflation. But the prospect of great productivity increases in an era of high unemployment must be greeted with some caution. There are many innovations that increase labor productivity and have beneficial effects in other areas. They may conserve raw materials, as does the microprocessor made from a few grams of silicon that can do the work it took a 30-ton computer to do in the fifties.

- Other innovations that increase productivity may help reduce pollution or energy consumption, break production bottlenecks, release humans from dangerous work, or produce goods or services that could not be provided with any other technology. Not least, they may increase human leisure—but that is where the problems arise. Involuntary leisure is another name for unemployment, and in a technological age the distinction between them is a fine one. If fewer hours of work are needed for the direct production of goods and services, new ways of distributing both the hours and the fruits of production must be devised—ways that ensure that all members of the labor force have access to the social and psychological benefits of work as well as the economic ones.

Some of the European trade unions have allowed the notion of work-sharing to infiltrate traditional views on job protection. Shorter hours have entered the negotiating arena along with, and often moderating, demands for pay increases. The European Commission is preparing to advocate a 10 percent cut in working hours, bolstered by a public opinion survey conducted for the Commission in late 1977 that showed a majority of the European Community's working population favored shorter hours over higher pay.³⁷ American labor unions, for the most part, reject the idea of work-sharing, insisting still that higher growth will cure unemployment.

One of the most frustrating aspects of unemployment in the OECD countries in the seventies is the apparent impotence of the conventional postwar remedies of expansionary macroeconomic policies. Economists speculate that there has been a shift in the trade-off between unemployment and inflation. In theory, there is a certain level of employment that is consistent with price stability. If the demand for labor pushes employment above that level, inflationary pressures build as labor costs are bid up. Conversely, if unemployment increases there should be enough slack in the economy to allow the government to encourage higher levels of output, and thus of employment, without generating inflation.

Some policymakers now fear that the price level/employment relationship has shifted in a way that allows a relatively high level of unemployment to trigger inflation; this expectation dictates caution in the application of expansionary policies. Others believe that the assumed relationship between jobs and price stability, if it ever existed at all, has dissolved in the face of the changed nature of inflation and unemployment in the seventies.

Inflation is not simply a matter of excess demand that can be wrung out of national economies by conservative fiscal and monetary measures. The current inflation stems in part from political and even biological factors. Events like the 1973 oil shock and the 1979 Iranian Revolution, or like the crop failures in India and Russia and the collapse of the Peruvian anchovy fishery in 1972, led to huge increases in energy and food prices. National economic policies can do little in the short run to moderate the impact of external events like

these. External factors unbalance any trade-off between jobs and price stability, so that it would take a large increase in unemployment to bring about a small decrease in inflation.

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In a slow-growing economy, inflation takes additional impetus from the efforts of various groups within the labor force to enlarge their share of a slow-growing pie. An income-expectation spiral is set in motion as poorer groups struggle to attain the standard of living of those earning more than they are, while the more affluent struggle to preserve their "differentials and relativities," in the language of the British trade unions. Unless this ratcheting upward of pay demands is accompanied by some real change in economic power, the relative positions of all groups stay roughly the same. Income distribution in the West during the inflation-plagued seventies has not changed significantly. And unless the upward drift of income is accompanied by real growth in output, the income gains are largely illusory. Thus in Britain, where growth in real output was only 4 percent between 1973 and 1979, an average industrial-wage gain of 111 percent was all but canceled by an average price rise of 107 percent.³⁸

Thus, the internal structures of an economy can buoy inflation, even in periods of relatively slack demand. The power of huge corporations to set prices independently of market demand, the ability of some powerful unions to demand high wages regardless of the general state of the labor market, the unique ability of governments to live beyond their means through budgetary deficits and expansive monetary policies, and the automatic adjustment (indexing) of large segments of the economy to the inflation rate all contribute to inflationary pressures. An economy characterized by these internal structures and subject to the vicissitudes of international commodity prices has little hope of controlling inflation by "accepting" a relatively high level of domestic unemployment.

The twin problems of competition from abroad and competition from machines require specialized policy responses from Western governments. The easiest response to competitive pressures, at least in the short run, is protectionism. In the long run, however, protectionism is costly. Domestic consumers pay higher prices for the protected products, and foreign workers lose job opportunities.

Ultimately, domestic workers may lose jobs as well, for the Third World countries are even more important to the rich countries as customers than as competitors. If the poor countries cannot sell abroad they will not be able to buy abroad either, and jobs in the industrial countries will suffer. In 1977, the manufactured goods that North America shipped to the developing countries were worth twice the amount of its manufactured imports from them. Western European exports to the Third World countries were five times its imports from them, and Japan's ratio was ten to one.³⁹ Protectionist barriers invite retaliation, and the rich countries have more to lose, in absolute terms, than the poor do. Any protectionist policies that are adopted, therefore, should last only long enough to give domestic industries a chance to restructure if possible or to give workers time to find other employment after a period of retraining if necessary.

These adjustments are not quickly or easily made, as the French Government painfully learned in early 1979. Under the European Community's Davignon Plan, steel-making capacity in Europe is to be reduced as the industry is streamlined to improve its competitive position in international markets. The French Government, embracing the imperative to restructure the industry, adopted a plan that would pare 23,000 jobs from French steel payrolls by the end of 1980. Reaction in the steel-producing regions, especially in hard-hit Lorraine, was immediate, intense, and sometimes violent. Premier Raymond Barre, author of the French plan, came under strong political attack as the government faced one of its most severe tests since the riots of 1968.⁴⁰

The connection between unemployment and political unrest is seldom as clearly drawn as it is in Lorraine. The linkage is often difficult to trace; widespread social and political unrest usually have multiple causes. But there can be little doubt that unemployment is a powerful fuel for discontent. In modern industrial nations, managing the economy in such a way that unemployment is kept to a minimum is one of the major responsibilities of the government. In his book *Injustice: The Social Basis of Obedience and Revolt*, Barrington Moore, Jr., suggests that revolts break out not in response to tyranny, but rather in response to governments' inability to perform the func-

"If the poor countries cannot sell abroad they will not be able to buy abroad either, and jobs in the industrial countries will suffer."

tions that citizens expect of them.⁴¹ Widespread, persistent unemployment is one of the most prominent signs of such incompetence.

Governments may attempt to fulfill their responsibility to maintain employment in several ways. In Lorraine, the French Government is trying to persuade private industry to invest in the region and to provide jobs for a substantial number of the steel industry's cast-off workers. To this end, France is ardently wooing the Ford Motor Company, which has announced its intention to build a one-billion-dollar European plant that will employ 8,000 people. The French feel that these jobs, along with the secondary employment such a plant would generate in its vicinity, would provide a desperately needed boost to the shattered economy of Lorraine.⁴²

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But the French are not alone in their employment problems, nor in the political pressures that attend them. Several other European countries are also courting Ford, including Austria, Spain, and Portugal. The competition between them is a disturbing spectacle in which nations bid against each other for jobs—and the higher their unemployment rates, the higher they are willing to raise their bids. The bids take the form of subsidies to the company that has jobs to auction. Austria, for example, has offered Ford \$300 million in investment grants, a prime industrial site close to Vienna at no charge, guaranteed training facilities for the required labor force, and substantial tax advantages.⁴³

Though many other factors undoubtedly enter into the decision on where to locate plants, the Ford Motor Company is by no means unique in eliciting high bids for plant locations. Volkswagen set off a similar competition between several states in the US when it was looking for a site for its first American assembly plant. The state of Pennsylvania won the Volkswagen plant with a combination of tax breaks, low-interest loans, and transportation subsidies, equivalent to about \$70 million in public funds.⁴⁴

Business magazines and the financial sections of newspapers everywhere are full of advertising that trumpets the generosity of the tax structure, the docility of the labor force, and the quality of public services in particular states, regions, or countries. These enticements

represent a transfer of funds from taxpayers to private corporations. The larger the corporation, the greater its ability to provide jobs and thus the higher the bids it can command. The end result of this process is reinforcement of an already skewed distribution of economic power.

If investments like the proposed new European Ford plant or Volkswagen's American venture are economic for the companies involved, these plants presumably will be built somewhere. Competitive bids by governments to influence their location does not create employment; it simply moves it around. Meanwhile, public financial resources that could be used to generate productive employment are transferred to private companies, which may or may not use them to create jobs in the community that contributed the funds. There is no guarantee that the public interest will be served by corporate decisions, though of course it may be. Unless one genuinely believes that "what is good for General Motors (or Ford or Volkswagen) is good for the country," there is reason to question whether the consignment of public funds to private companies is a proper allocation of resources.

The money that governments spend to attract private employers could be better spent directly in targeted employment programs. The direct approach has a double advantage. The jobs created can be designed to fill needs that the private sector has left unmet, such as transportation, social services, or environmental protection. The jobs can also be offered preferentially to those who are most in need of employment: unskilled youths, workers displaced from fading industries, or victims of discrimination. Most of the industrial countries have some employment programs that are aimed at disadvantaged groups, though they vary greatly in scope and coverage.

Current government employment programs fall into four broad categories: creation of public-sector jobs through government hiring or public works; subsidies to private employers who take on new workers, especially from among the disadvantaged; training programs for those who lack skills or whose skills have become obsolete, often accompanied by assistance in job placement; and encourage-

ment of early retirement. Sweden, with activities in the first three of the four categories, is currently devoting 2.5 percent of its gross national product to employment programs. It is estimated that the extremely low unemployment rate (under 2 percent) in Sweden would be at least 5 percentage points higher without these programs.⁴⁵

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The existence of shortages of skilled labor alongside high unemployment rates suggests that training in marketable skills is perhaps the most promising approach governments can take toward ending structural unemployment. Government support for such training encroaches very little on the workings of the private economy. Skills training is a logical extension of the government's responsibility in education, and it enables people to work in the private sector rather than settling them permanently onto the public payroll. Creation of permanent public-sector jobs is appropriate, however, in communities where basic social services are not being provided. The Comprehensive Employment and Training Act in the United States has, among other things, provided funding for employees in community organizations that could not afford to pay permanent staff. Some of these have become important local centers for job training and community revitalization.

Public works programs aimed particularly at young people can ease the transition from school to work and break the frustrating cycle of "no experience-no employment." These programs have particular appeal because they can be adjusted to fit the number of young people without jobs. If the labor surplus does diminish in coming years as the demographic slowdown in the industrial world makes itself felt in the job market, these programs may no longer be needed.

In the poor countries, there is no doubt that the supply of labor will continue to soar, at least until the end of the century and probably beyond. Raising the income and the productivity of the rural poor is the appropriate focus for employment policy in most of the Third World, for at least four reasons. Firstly, manufacturing cannot absorb the required numbers; the capital costs of creating modern industrial jobs are far too high. The average cost of creating one workplace in

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the United States, according to Colin Norman, is in the neighborhood of \$20,000, and modern industrial jobs do not come much cheaper in the Third World.⁴⁶ Very few developing countries can afford such job-development expenditures. Secondly, most cities in the Third World are already severely strained by an influx of migrants from the countryside. Only the development of economic opportunities in the rural areas can stem this flow. Thirdly, the agricultural sector in most (though not all) poor countries does have considerable "excess capacity"—ample scope, that is, for intensifying labor use and raising productivity. Fourthly, a flourishing agricultural base can support a network of decentralized, labor-intensive industries if the benefits of increased production are evenly shared.

If the productive capacity of the rural sector is to be realized, development strategy must be clearly focused on the mobilization of poor countries' most abundant resource: labor. Such a labor-oriented strategy is likely to require changes in the distribution of privately owned resources, especially land; in the organization of the labor market, with government programs playing a major direct role in some stages; and in the priorities of public spending, which should reflect a rural bias. Above all, a labor-oriented strategy must emphasize equity. Extraction of more productive labor from the people in the countryside without a greater sharing of the benefits is no more than exploitation.

The emphasis on equity used to be somewhat suspect in economic literature, and still is in some quarters. It was assumed that there would be a trade-off between growth and equal distribution. Small-scale, labor-intensive production was thought to be inefficient, the rich were expected to save more of their income and thereby generate investable funds, and the profits of the richer producers were supposed to act as an incentive for greater efficiency and investment. By now, however, a substantial amount of evidence to the contrary has accumulated in the agricultural sectors of some Third World countries. Where small farmers have equal access to irrigation, improved seeds, fertilizer, credit, and technical advice, they equal or surpass the productivity of large farmers. They also save and invest at impressive rates when financial institutions are appropriately designed to meet their needs.

"In poor countries where land is unevenly distributed, land reform should be a cornerstone of employment policy."

Almost universally, the small farmer uses more labor per hectare than the large farmer does. Often, this labor comes from the farm family rather than from hired workers. A farmer will only hire workers as long as the market value of what they produce exceeds their wage. Because family members are not usually paid a wage, the use of their labor is under no such constraint. They can invest their labor in activities that would be uneconomic if they were done with wage labor, but that yield substantial benefits in absolute terms. The only requirement for the use of family labor is that the return be positive. The return may in fact be only a small fraction of the prevailing commercial wage rate. John Kenneth Galbraith wryly calls this investment of one's own labor "self-exploitation."⁴⁷ It can soak up rural underemployment by enabling families with small landholdings to transform their own unused labor into something of economic value. It accounts at least partially for the high labor-intensiveness of small farms.

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Economist Keith Griffin found that small farms in Colombia use labor five times as intensively as large farms and 13 times as intensively as cattle ranches do. In Taiwan, too, labor intensiveness is inversely related to farm size. India's sixth Five-Year Plan states without qualification: "Land distribution will increase employment in agriculture because small holdings systematically employ more labor per hectare than large holdings. And, there need be no loss of productivity per hectare because, given equal access to credit and materials inputs, small farms yield more output per hectare than large farms."

In order for small farmers to lavish their labors on the land, they must feel certain that the fruits of that labor will accrue to them. The self-exploitation mechanism doesn't apply to hired labor. It is much weaker for tenants than for cultivators who own their land, but it can be strengthened by laws that strengthen their security of tenure. Most of the less-developed countries that have gotten the better of rural poverty and underemployment have implemented land reforms: Taiwan, South Korea, China, Cuba, and within India, the state of Kerala. Recent history indicates that in poor countries where land is unevenly distributed, land reform should be a cornerstone of employment policy.

Difficult as it may be to implement, land reform on its own is not enough. In Mexico, the partial redistribution of land has not been accompanied by improved access to agricultural inputs for small farmers. A gulf has developed between the highly productive, large-scale, modern commercial farms and the capital-starved small farms where productivity is barely up to subsistence level. Investments in small-scale agriculture normally can pay for themselves in short order, but few individual smallholders have the working capital to introduce the improvements that can break the cycle of low production and low labor use.

Irrigation alone can increase labor demand per acre by up to 80 percent, reports Colin Norman, while high-yielding seeds that need careful fertilizer and pesticide applications increase employment still further.⁴⁹ Provision of these inputs, along with the technical advice (through extension services) and credit arrangements that enable small farmers to use them, are a second crucial element of rural employment policies. Equity considerations must be paramount in such policies, however; there are innumerable horror-stories about the Green Revolution that illustrate the potential for modern agricultural techniques to displace labor and worsen income distribution when they are available only to the well-to-do.

An agricultural system that has a particularly rich potential for increasing employment and equity is multiple-cropping. Multiple-cropping combines the yield-enhancing techniques of the Green Revolution with crop rotation, intensive labor use, meticulous land management, and split-second timing. It thrives in conditions of labor abundance and land scarcity, and is relatively sparing of capital. These characteristics make it extremely well-suited to small farms in heavily populated areas. Multiple-cropping manipulates the time dimension of agriculture in much the same manner that high-yielding varieties manipulate the spatial dimension: the former enables a grower to get more production out of a fixed quantity of time (the growing season) just as the latter enables her or him to get more out of a fixed quantity of land.⁵⁰

The system has many benefits. Multiple-cropping minimizes seasonal variations in the demand for labor, increases total employment, raises

"Rural dwellers who cannot find employment may be forced to turn to livelihoods that severely damage the rural environment."

farm income, and improves the local diet. Income disparities are usually reduced in two ways. Because multiple-cropping is especially well-suited to small farms, it increases the income of small farmers relative to larger landholders. And because it requires high labor inputs, the system usually improves the bargaining position of landless laborers. As a result, the income disparity between the landless and the landed usually diminishes.⁵¹

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Multiple-cropping depends to a considerable extent on irrigation, fertilization, and early-maturing crop varieties. In some instances it may also depend on a degree of mechanization. Harvesting one crop and planting the next may have to be compressed into a shorter time than human labor alone could accomplish. In multiple-cropping areas, as in most of the Third World, however, mechanization of agriculture needs to be approached with great caution.

Mechanization can be appropriate for labor-rich regions if it increases land and labor productivity simultaneously, or if it increases the scope for labor use. Guy Hunter reports, for instance, that Japan's highly mechanized small rice farms use twice as much labor per hectare as the less mechanized rice farms in India do.⁵² But mechanization can easily displace labor without increasing crop yields; labor productivity increases, but under the circumstances this merely serves to polarize the rural economy between highly productive, mechanized farmers and impoverished laborers who can find little productive work.

Rural dwellers who cannot find employment may be forced to turn to livelihoods that severely damage the rural environment. All over the Third World the scars of unproductive employment mark the landscape: denuded hillsides, eroding fields, encroaching sand dunes, receding forests. If they cannot find work elsewhere, people will find it on fragile lands that never ought to be brought under cultivation. The price of failing to create employment opportunities goes beyond the waste of human resources; it may extend to the destruction of natural resources by people who have no alternative source of livelihood.⁵³

The other side of this gloomy prospect is the potential for using surplus labor to enhance or even create productive resources. In rural areas of most poor countries there is a desperate need for projects in reforestation, water conservation (including irrigation, drainage, and flood control), land reclamation, sanitation (linked to fertilizer and biogas production), and soil conservation. Labor-intensive projects in these areas would have the effect of transforming abundant labor into valuable capital. And they would leave in their wake permanent employment opportunities.

Successful transformations of surplus labor into capital can be found on varying scales in many parts of the Third World. Some of the most outstanding examples come from China's rural communes, where campaigns of an almost military style mobilized peasants during the off-season to improve, and sometimes to create from scratch, an agricultural infrastructure. Using very little but their own labor, the peasants built check dams to store irrigation water and to control floods, dug irrigation canals and drainage ditches, planted trees, leveled fields, constructed terraces, and erected dikes. The most famous of these communes is Tachai, where steep, barren hillsides were turned into productive terraced farmland through painstaking hand labor. Chronic seasonal underemployment has been greatly reduced in China, if not eliminated, and the productivity of the land has been dramatically increased. James Grant estimates that farm laborers in North China used to work perhaps only 120 to 150 days a year, because the dry, degraded cropland would support only one crop a year. Today, he reports, these same areas provide a minimum of 300 days of productive work per year for the average farm worker.⁵⁴

The experience of one country cannot be transferred wholesale to another. Yet the mobilization of idle workers to transform their surroundings has proved its viability in settings outside China. In the Shawnirvar, or self-reliance, movement in Bangladesh, the residents of a small number of villages have pooled their labor and created economic resources such as wells, canals, and roads. The people in one village, for instance, drained 18,000 water-logged acres by excavating a three-mile canal. According to Denis Warner, the Shawnirvar villages lost no one in the 1974 famine, when at least 100,000 people died in the rest of Bangladesh.⁵⁵ In a country with few resources

other than land, water, and people, new ways of putting these three factors together productively are virtually the only hope for combatting poverty. Poverty and underemployment are inextricably entwined—and so are their solutions.

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The countryside of South Korea today provides tangible evidence of the potential for creating an economic resource out of little but human ingenuity and labor. Erik Eckholm reports that "row upon row of young trees . . . in parts of the country seem to cover virtually every spot of land not being farmed. Large areas of South Korea have been transformed from lands of barren hills into lands of young pines; according to government figures, more than one-third of the national land area is stocked with trees less than ten years old."⁵⁶ This massive reforestation campaign is the work of village forestry associations whose members donate their time and share the benefits. Every village household is represented, in a curious combination of volunteerism and compulsion. Nonetheless, the labor, volunteered or compelled, has produced in Korea a valuable resource capable of filling local energy needs as well as providing lumber and a host of other forest products. The newly created forests will be a steady source of productive employment and will materially improve the standard of living in the countryside.

Traditional approaches to capital formation will not generate employment opportunities fast enough to absorb the labor-force increases that are immediately in prospect for most Third World countries. China, Korea, and even Bangladesh provide examples of some alternative approaches, based on social as well as economic transformations. The inadequacy of conventional economic policies in creating employment is likely to become more acute as growth in the labor force accelerates, even if the policies are flawlessly executed. Social policies that provide a framework for the mobilization of labor thus will become an ever more compelling partner to economic policies in the effort to provide productive work for those who need it.

Government finance of labor-intensive public works to create productive assets in the countryside represents a transfer of resources from the urban to the rural sector, since the bulk of tax revenues in most Third World countries originates in the cities. Such a transfer

is entirely appropriate given the circumstances of most poor countries, for poverty and underemployment are concentrated in the countryside. While appropriate, the transfer is not an easy one to accomplish. Political power, like taxable income, is concentrated in the cities. Directing resources to the rural poor represents a transfer of income from the powerful to the powerless in most cases, and few things are more difficult to accomplish.

The employment benefits of such transfers are undeniable. They work at both the individual and at the sectoral level. The poor spend more of their income than the rich do on basic wage goods like food, textiles, building materials, bicycles, shoes, and cooking utensils. These items are more labor-intensive than are consumer goods of greater sophistication. They tend to be locally produced, using locally available materials, and so have a multiplier effect on local employment. The Indian Planning Commission calculates that with India's current income distribution, every million rupees transferred to the poor from the non-poor will create 29 person-years' worth of additional employment by stimulating more labor-intensive production.⁵⁷

Political resistance to redistribution of income is the most formidable obstacle to rational employment policies in rich and poor countries alike. Resistance is not confined to the extremely wealthy—the industrial barons and big landlords. It is also entrenched in the middle classes and in that part of the working class—largely the skilled, organized segment—that enjoys secure employment and relatively high wages. Thus India's major trade unions stand staunchly against a government study-team's recommendation that low-wage sectors should be allowed to increase their earnings faster than high-wage sectors.⁵⁸ The interests of union labor in much of the industrial world are also increasingly perceived as being opposed to the interests of unskilled workers.

This division of interests between the very poor and the middle-income group is reflected in a nascent dispute over strategy between international development agencies and many developing-country governments. Charles Frank and Richard Webb describe the conflict as between "most aid-givers and foreign observers, who currently tend to emphasize the alleviation of extreme poverty, and govern-

ments of most developing countries, which are more likely to favor urban and (organized) labor groups that fall outside most definitions of extreme poverty.⁵⁹ In fact, say the two economists, the groups favored by Third World governments are usually in the top third or quarter of the income scale. 41

There is some irony in the concern of the donor countries' governments over distribution of income to the poorest in the Third World when their own domestic policies do little to redistribute income at home—and for the same reason. There is of course a big difference between the absolute poverty of the Third World poor and the relative poverty of the lowest income classes in the rich countries, but the irony remains. It is heightened at times like the present when economic growth is slow. In the United States, for example, part of the current response to slow growth is to cut social programs that help the poor (including employment programs) in order to reduce the tax "burden" of the middle classes. Most ironic of all is the refusal of most Western governments to make genuine full employment a top policy priority.

Policies that can end the waste of human resources and the persistence of poverty caused by lack of productive employment will only be devised and implemented by governments that have a genuine commitment to economic justice. Governments that lack this commitment may be prodded toward it by the real economic gains that progress toward equitable distribution does present in many cases. They may be bribed into it by aid agencies that do not wish to perpetuate income disparities in the developing countries. They may be frightened into it by the threat of massive political unrest among increasing numbers of marginal people frustrated by their inability to find work. But commitment to justice that is induced rather than inherent is not necessarily a stable foundation for constructive change. To the extent that this commitment falters, equitable employment policies will be compromised.

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